

Patent CLAIMS

1. A three-wheeled vehicle comprising a frame with engine, drive gear and at least one driven wheel at the rear, and two front wheels respectively on each side of the front of the vehicle, each of the front wheels being suspended by a wheel suspension having two transversal bars arranged above each other, which transversal bars are pivotally secured to the frame at an upper and a lower level, the vehicle at its front end having a forward frame member,
c h a r a c t e r i s e d i n that at the front part of the vehicle there is provided a transfer frame having a longitudinal frame member parallel to the longitudinal direction of the vehicle frame, on which longitudinal frame member there is provided a spring anchor, in which spring anchor on each side of the longitudinal direction of the vehicle there is connected a spring means which also is connected to at least one of the transversal bars on the same side, which longitudinal frame member of the transfer frame is pivotally attached to the forward frame member at a distance from the longitudinal rotation centre line of the vehicle.
2. The vehicle according to claim 1,
c h a r a c t e r i s e d i n that the longitudinal frame member of the transfer frame is pivotally attached to the forward frame member at a distance above the longitudinal rotation centre line of the vehicle.
3. The vehicle according to claim 1,
c h a r a c t e r i s e d i n that the longitudinal frame member of the transfer frame is pivotally attached to the forward frame member at a distance below the longitudinal rotation centre line of the vehicle.
4. The vehicle according to claims 1-3,
c h a r a c t e r i s e d i n that there is provided a damping means in connection with the spring means.
5. The vehicle according one or more of claims 1-4,
c h a r a c t e r i s e d i n that the spring anchor (10a, 10b) projects up perpendicularly above the longitudinal frame member.
6. The vehicle according to one or more of claims 1-5,
c h a r a c t e r i s e d i n that the attachment of the transfer frame to the main frame can be varied in predefined holes 15, 17.
7. The vehicle according one or more of claims 1-6,
c h a r a c t e r i s e d i n that the transversal bars are A-bars.
8. The vehicle according to one or more of claims 1-7,
c h a r a c t e r i s e d i n that there is provided one or more spring devices between the main frame and the transfer frame.

9. A three-wheeled vehicle comprising a frame with engine, drive gear and at least one driven wheel at the rear, and two front wheels respectively on each side of the front of the vehicle, each of the front wheels being suspended by a wheel suspension having two transversal bars arranged above each other, which
5 transversal bars are pivotally secured to the frame at an upper and a lower level, which vehicle at its forward end has a vertical frame member, the vehicle being provided on each side with a footboard,
c h a r a c t e r i s e d i n that at the front part of the vehicle there is in addition provided a transfer frame having a longitudinal frame member parallel to the
10 longitudinal direction of the vehicle frame, on which longitudinal frame member there is provided a spring anchor, to which spring anchor on each side of the longitudinal direction of the vehicle there is connected a spring means which also is connected to at least one of the transversal bars on the same side, the longitudinal
15 frame member being pivotally attached to the forward frame member at a distance from the longitudinal rotation centre line of the vehicle, and the footboards being pivotally attached to the vehicle frame about its longitudinal axis, and that each of the footboards on its respective side is connected to the transfer frame.
10. The vehicle according to claim 9,
c h a r a c t e r i s e d i n that the longitudinal frame member of the transfer
20 frame is pivotally attached to the forward frame member at a distance above the longitudinal rotation centre line of the vehicle.
11. The vehicle according to claim 9,
c h a r a c t e r i s e d i n that the longitudinal frame member of the transfer
25 frame is pivotally attached to the forward frame member at a distance below the longitudinal rotation centre line of the vehicle.
12. The vehicle according to claims 9-11,
c h a r a c t e r i s e d i n that the connection between the footboards and the transfer frame is articulated.
13. The vehicle according one or more of claims 9-12,
30 c h a r a c t e r i s e d i n that there is provided a damping means in connection with the spring means.
14. The vehicle according one or more of claims 9-13,
c h a r a c t e r i s e d i n that the spring anchor (10a, 10b) projects up
perpendicularly above the longitudinal frame member.
- 35 15. The vehicle according to one or more of claims 9-14,
c h a r a c t e r i s e d i n that the attachment of the transfer frame to the main frame can be varied in predefined holes 15, 17.
16. The vehicle according one or more of claims 9-15,

c h a r a c t e r i s e d i n that there is provided one or more spring devices between the main frame and the transfer frame.

17. The vehicle according one or more of claims 9-16,
c h a r a c t e r i s e d i n that there is provided a servo or power amplifier
5 which supplies a torque or a force that is essentially proportional to the torque or
the force transferred from the footboards to the transfer frame.